

Vishvanath Khaire

NEW INDOLOGY
1999

Untenable Axioms of Indology

Science and Mythology in Sanskrit

Navakhandapuram

Heart and Head

New Light on Land Culture
in Maharashtra

Untenable Axioms of Indology

Vishvanath Khaire

The scope and contents of Indology, as studied at present, are best gauged from a textbook. Consideration of the first two chapters of The Wonder That Was India by A.L.Basham, brings out what can be called the 'axioms' of Indology which are dealt with in this Paper in relation to the whole of India and all Indian languages, rather than to Europe and the European languages plus Sanskrit. It concludes that in the cause of truth, we need a New Indology, free from axioms and preconceptions.

1. Introduction

Indology is the study of culture in India, in prehistory and history. It is like Sinology for China or Egyptology for Egypt, both countries comparable to India in the very long time-span of cultures on their soils. There is however, one vital difference; the scholars who laid the foundations of Indology were convinced from the beginning that their own prehistory was somehow connected with that of the poets in one ancient language of India, with a literary corpus handed down generations.

The effects of this, a sort of 'subjective' involvement of the scholars can be perceived in the basic elements of the introduction to Indology in the academic field. The first two chapters of A.L.Basham's *The Wonder That Was India* that 'has been widely used as a college textbook, not only in England but also in India itself and in America' (vii, 1963 Ed.) are mainly considered here in this connection.

2. Geography and Culture

Jones the Father of Indology meant by India, the land from the Persian border to Java and from the hills of Tibet to the island of Sinhal. Even restricted to the Indian subcontinent, the area presents the mountains of Himalayas and Vindhya. According to Basham, "The chain of the Himalayas, ..divides India from the rest of Asia and the world. The barrier, however, was at no time an insuperable one..the effect of the mountain wall in developing her unique civilization has often been overrated."(p.1).However, on the very next page, we have: "*South of the great plain is a highland zone, rising to the chain of the Vindhya mountains. These are by no means as impressive as the Himalayas, but have tended to form a barrier between the North..Hindustan..and the Peninsula.*"(p.2).The two statements obviously go against common perceptions of the influence of mountain barriers on communications between peoples; for, a puny tropical mountain could not be a bigger barrier than a mountain-wall rising to tenfold heights, half of which are always snowbound.

The statement about Vindhya appears to have been formulated for reaching the conclusion that follows it : "The south-eastern part of the Peninsula forms.. the..Tamil country, the culture of which..is not yet completely unified with that of the North." But this view is negated on p. 8: in saying that, "At most periods of her history *India, though a cultural unit, has been torn by internecine war.*", the unity of culture in India, north and south, has been sufficiently acknowledged.

That the Vindhya *did not* form such a barrier even in protohistory is clear from statements about Harappa culture : "...it is possible that certain distinctive features of the Harappan culture penetrated to South India."(p.19) "The modern South Indian is usually a blend of Mediterranean and proto-Australoid, the two chief ethnic factors in Harappa culture. (Harappan) Religion shows similarities with elements popular in Dravidian country".(p.25)

Thus the statements on p.1&2 are untenable explanations for an untenable axiom about the intercommunication of cultures north and south of the Vindhya.

4. The Linguistic Axiom

Distinctions between languages of the North and South have also been pointedly referred : "*The Dravidian peoples of Southern India still speak languages in no way akin to those of the North and are of a different ethnic character*" (p.2). The difference in ethnicity alluded in this statement is answered partly by the quotation from p.25 above. Besides, it is now widely

accepted that language has no connection with ethnicity. The absence of kinship between languages is rather overemphasised ; for the 'retroflex sounds' in Sanskrit are said to have been 'borrowed very early from the indigenous inhabitants of India, either proto-australoid or Dravidian' (p.389) or that in classical Sanskrit, the 'remarkable use of long compounds may be due to the influence of Dravidian speech on the language..' (p.392).

However, the basic axiom is this : *'It has long been universally accepted that Sanskrit is a remote cousin of all the languages in Europe, with the exception of Estonian, Hungarian, Turkish and Basque. The relationship of Sanskrit to the languages of the West is indicated by several obvious resemblances, such as pitr, "father", and mātr, "mother", and many others which are less obvious'* (p.388).

It is well known that this relationship was first propounded in his address to the Asiatic Society in 1786, by William Jones , who 'Before coming to India, had recognised the relationship of European languages to Persian.. suggested that Persian and the European languages were derived from a common ancestor..' (p.5). For Jones, who learnt Sanskrit in India from written records, it was a simple extension of this position, to suggest that Sanskrit bears so strong an affinity to Greek and Latin that the three should have sprung from a common source. Jones did not live long enough to study , particularly the South Indian languages. Had he studied them, he might have included them also in the kinship tree.

We can say this by proper linguistic (semantic as well as phonetic) consideration of the 'obvious resemblances like *pitr, mātr*'. These words meaning 'father, mother' are related in Sanskrit to the roots ' *pā to protect, mā to measure*'. The semantic connection is quite weak, as father is a begetter more than protector and the mother does far more than just measure. It is also not clear why *pā* should become *pī*, but *mā* should remain *mā* in the same phonetic environment. If we turn to South Indian, we have

Ta. *pāru* beget, generate *pāṛṛāṅ* (*pāṛrān*) father, husband
mā tiru big woman

If we consider correspondences between Tamil retroflex and Sanskrit dental *t* in the first and tendency of analysing compound syllables with introduction of *i* or *u* in the second, phonetic resemblance will appear to be supported by the semantic as well.

The 'universal acceptance' in the axiomatic statement came about after Jones's suggestion was developed further in the nineteenth century by scholars of European languages. It has been noted that '...most of the nineteenth century indologists were primarily scholars in the classical tradition, working on written records' (p.6). For current Indian languages,

the written records were of considerably more recent ages. These languages were therefore generally left out of consideration in the study of Indology. The South Indian languages were studied by Caldwell who proposed a distinct family for them in 1856. If he had considered 'obvious resemblances' from Molesworth's dictionary published in 1831, he might have included Marathi in the same family. That would have been Indology based on living spoken languages.

The accepted view is that 'By the time of the Buddha the masses were speaking languages which were much simpler than Sanskrit. They were the Prakrits, of which several dialects have been attested...*māhāiāṣṭrī* spoken in the north-western Deccan...*māhāiāṣṭrī* was a literary language, especially popular for lyric song' (p.394). It is worth noting that within the space of two lines the character of the language is stated differently. Marathi would be a development from this literary language about a thousand years back. Bloch's 'Evolution of the Marathi Language' starts with : 'Not one of the Indo-European languages currently spoken in India, seems to go back to any language greatly different from Sanskrit, made known to us by the Vedic and Classical texts'. This can itself be considered an axiom, though it goes against the first axiom of the Vindhyan barrier. Enough linguistic evidence can be given of the preponderance of the SI element in most of the NI languages and thence to prove the invalidity of this axiom.

5. The Axiom of History

The literary record of the Vedas provided not only the linguistic axiom, but also the axiom of history. The seeds of this axiom were already contained in the Jones address and both were mutually dependent. In *The Wonder that was India*, the following statements are made about it :

"The earliest Indian literary source we possess is *the Rg Veda*. It is evidently *the work of an invading people*..(p.29)

"The invaders of India called themselves *Aryas*, a word generally anglicized into *Aryans*. (p.29)

"The *Aryan invasion* of India was not a concerted action, but one covering centuries and *involving many tribes*, perhaps not all of the same race and language. (p.30)

"If history, as distinct from archaeology, is the study of the human past from written sources, then *India's history begins with the Aryans*" (p.31).

"But they (the Vedic hymns) *tell us little about the great events of the time*, except in irritatingly vague incidental references" (p.31).

In this connection, *The Sanskrit Language* (T. Burrow 1973 ed.) has the

In this connection, *The Sanskrit Language* (T. Burrow 1973 ed.) has the following : 'For the Indo-Aryan invasion of India, no direct evidence is available (p. 31). ..in the text of the Rgveda itself, although historical allusions are not uncommon, there is no reference anywhere to the fact of the migration, nor any definite indication that it was still remembered (p.33)'. The word *Arya* itself occurs in the Rg Veda sparingly. If the Vedic hymns '*tell us little about the great events of the time*' they cannot be called '*the work of an invading people*'.

Indology of the 19th century was dominated by this axiom. After discovery of the Harappa culture through excavations, though the chronology of Indian history was pushed back, the axiom only helped to identify the victim of the Aryan invasion in the Harappans. 'It is suggested that ..the forts or citadels which the Vedic war-god Indra is said to have destroyed included Harappa in their number' (p.29). This 'suggestion' is off the mark for two reasons. Gods, including war-gods are mythical personages with mythical exploits attributed to them. Indra in the Veda is mainly the rain-god, whence the 'forts or citadels destroyed' by him should also be mythical, and relating to clouds and the like in nature. (If we accept to the SI connection, the names *purandara* and *indra* should mean 'leader and shepherd' rather than 'destroyer of forts' as explained from Sanskrit.) Secondly, evidence is now mounting that the Harappa culture was not destroyed by human invaders but by natural events.

Derived from the same axiom, are historic actions ascribed to sages merely mentioned by name in the text or in connection with one or the other hymns. For example :

"The eighth gotra, that of *Agastya*, is named after the sage who is said to have taken the *Vedic religion beyond the Vindhya*s, and who is a sort of *patron saint of the Dravidians*. His name may have been added to those of the original seven as the south became progressively *Aryanized*" (p.155).

"The *ṛsis* were the composers of the Vedic hymns, and other legendary wise men of olden times *who had been translated to heaven..*" (p.320)

"And *Agastya*, who taught the southerners religion and culture." (p. 321)

The text of the hymns does not contain any of these allusions. The very concept of 'being translated to heaven' is totally mythical. It points clearly to the real status of *Agastya*, which is the name given to the brightest star near the southern horizon, mistakenly considered the south pole.

The allusions to *Vindhya*s and the *Aryanisation* of the south represent historicification of purely mythical stories in minor supplementary episodes in the epics which are said to be "...so overlaid with accretions..it may never be

possible to sift the fact from the fiction.." (p.37).

In the instant case, there is no historical fact in the fiction, beyond this : Agastya is the sanskritized name of the star from SI *agatti* meaning 'householder' as well as the tree *Sesbania grandiflora*, bearing the largest flower in edible pod-fruit trees. In apposition to the seven star-sages of *Ursa Major* in the north, *agastya* was conceived as the star-sage of the south, who had parted company with the northern seven. This *journey* of his would involve crossing the *celestial Tropic of Cancer*. In astronomical treatises, celestial positions were referred by their corresponding locations (like towns, mountains, rivers etc) on the earth. So the Ganga represented the milky way and Vindhya the Tropic of Cancer. Thus was born the mythical story of Agastya crossing the Vindhya.

Fictitious history was constructed on the foundation of this star-tree-mythical story, accepting the text as literally true. The untenable axiom of the Vindhya-barrier arose out of this, as did the other two from accepting the phonetic etymologies and Vedic literal texts .

6. Conclusion

At present Indology is introduced to academic students through untenable axioms which have not been challenged since the foundation of the discipline on them. The conclusions provided by Indology are therefore misleading and yet the academics are unable to perceive their internal contradictions. The situation can be corrected by an open-minded study of all Indian languages in relation to Sanskrit and a multidisciplinary study of the mythical Vedic epic and puranic literature in relation to the Indian milieu milleniums ago. Elimination of the untenable axioms will transform the discipline into what may be called "New Indology".

□

Science and Mythology in Sanskrit

Vishvanath Khaire

Science is supposed not to have anything to do with myth. Mythology is supposed not to contain any science.

In Sanskrit literature we often find science explained through myths and mythology based on science, if elementary. This applies to astronomy in particular, for the largest number of myths are based on astronomical phenomena.

Examples are taken from the Aryabhatiya, the 1500-year old work on astronomy and mythical episodes from the Vedas and epics.

It is seen that even exact scientists in ancient India accepted traditional myths, which at their roots were primitive or poetic metaphors of minutely observed, striking natural phenomena.

1. Introduction

Science, as we understand it today, is based on objective observation, necessary experimentation and rational hypothesisation. Myths generally available to us in traditional पुराणकथास (mythical episodes) are considered imaginative speculations of the primitive ancients, and so, devoid of science.

This was not the case in the ancient world. Curiosity in the human mind was as keen as and perhaps keener than it is today, when the humans were face to face with the earth and heavens in their pristine condition. Observation, understanding, speculation, imagination..all these activities go on in the human brain almost at the same time or in quick succession. Therefore, what can be called elementary science was holistically felt and communicated by the ancients through metaphors. Often the metaphors were personified and made into characters of stories describing natural phenomena as episodes in the life of those personages, human, superhuman or subhuman. It was the metaphors that thus formed a bridge between what are called as science and myth and considered as distinct, if not opposed, to one another. A few examples are considered from the science of astronomy

in ancient India to show how the metaphors in science were related to the mythical stories come down the generations.

2. Metaphors in āryabhaṭīya

Aryabhata was the famous Indian astronomer of the 5th century whose scientific treatises, the Aryabhatiya and the Aryabhata Siddhanta were followed widely for centuries, for astronomical calculations. The former in four chapters of 120 verses in all, deals with basic definitions, mathematics, measurement of time, and finally the celestial sphere and rotations of its contents. This last, called the गोलाध्याय speaks thus of the 'motion of stars' :

अनुलोमगतिर्नोऽस्थः पश्यत्यचलं विलोमगं यद्वत्

अचलानि भानि तद्वत् समपश्चिमगानि लङ्कायाम् ।९।

'Just as a man in a boat moving forward sees the stationary objects (on either side of the river) as moving backward, just so are the stationary stars seen by people at Lanka (on the equator) as moving exactly toward the west.' (p. 119, K S Shukla 1976)

This verse is of profound importance to science. It is couched in a metaphor based on everyday earthly observation. The apparent movement of objects on earth is perceptible to the boatman because the distances involved are small. The apparent movement of the stars is not as easily perceived. Yet the hypothesis is formed, on the basis of qualitative similarities.

It is but a small step ahead to imagine that the stationary objects seen as 'moving backward' are pursuing one the other and to feel the same way about stars. So a star towards the east in the sky can be imagined to be pursuing the one toward the west. If the stars are given names and personified, the metaphorical person-characters can be said to be doing the same in a story.

A famous episode in the Aitareya Brahmana is seen to be doing just this. 'Prajapati felt lustful desire toward his daughter. He took the form of an antelope and followed her who became Rohit (ऋश्यो भूत्वा रोहितं भूतामभ्यैत् 1.9.91). The gods, embarrassed by this unprecedented act, requested Pashuman who took aim at Prajapati. Hurt, he went to the skies. He is called *Mrga*'. S.B.Dikshit in 'The History of Indian Astronomy' explains the metaphor :

'..the names रोहिणी मृग मृगशीर्ष should have been given from the imagined figures. As these constellations, having risen in the east, proceed to the west, it appears as if मृग is chasing रोहिणी, and व्याघ्र is chasing मृग and from this the रोहिणी-प्राजापति story would have been imagined. (p.58, Marathi Ed)

It will not be proper to see anything more in this story vis-a-vis the simple phenomena considered in the आर्यभटीय. 'The Orion' (B.G.Tilak 1893) however says :

Can we not herein discover the fact that the sun was gradually receding towards rōhīṇī by the precession of the equinoxes ? ..It has been suggested that we should explain the legend of praajāpati by reference to the dally rising of rōhīṇī, mrgasīras and rudra in succession. But this explanation hardly accounts for the fact why praajāpati was considered as literally running after rōhīṇī in an *unprecedented* way.. (p. 227-28).

This interpretation exploits the word 'unprecedented' in this weird episode to draw a very advanced conclusion in astronomy about precession, which can be felt after many generations. That word is an epithet relating to social mores ascribed to the metaphorical beings : lesser constellations being 'daughters' of the impressive 'Orion', the father pursuing his own daughter - an *unprecedented* act for *devas* who should bear exemplary character.

3. Lanka and the Equator

The verse makes it clear that the exact east to west movement is observed at Lanka (the equator). If the observer is located at a place with latitude (north or south of the equator) there would be deviation from the true east-west direction. Scientific accuracy is thus maintained inspite of the boat-metaphor being employed.

We should however take note of the place-metaphor in Lanka being equated to the equator. This is made clear in a later verse :

स्थलजलमध्यात् लङ्का भूकक्ष्याया भवेत् चतुर्भागे

उज्जयिनी लङ्कायाः तच्चतुरंशे समोत्तरतः ।१४१

From the centres of the land and the water, at a distance of one-quarter of the earth's circumference, lies Lanka; and from Lanka at a distance of one-fourth thereof, exactly northwards, lies Ujjayini.

This is also made clear in another respected work on astronomy, the पञ्चसिद्धान्तिका, which has :

विषुवत्लेखाऽथस्तात् लङ्का तस्यां समो भगणगोलः

त्रिंशन्नाड्यो दिवसः त्रिंशच्च तस्यां सदा च निशा ।२९। त्रैलोक्यसंस्थानम् ।

Lanka is beneath the celestial equator, i.e. the celestial equator itself is the prime vertical at Lanka. There the stellar sphere is equally divided.

There the day and night are always 30 नाडीस each. (Pncs of Varahmihira : T S Kuppanna Sastry. 1993)

The place-metaphor Lanka for the equator is thus confirmed. Ujjayini is also

is the wellknown prime vertical of Indian astronomy, stated to be north of Lanka on the same longitude. As facts of geography, the end of the land of Lanka is at about 6 degrees of latitude and Ujjayini at 23.09 while the longitudes of the two are at least 5 degrees apart. The designation of coordinates by places is approximate to this extent. We may say that the nearest wellknown places were taken to indicate the abstract celestial places.

4. Demons of Mythology

Lanka the southernmost landmass of India was wellknown in mythology as the domain of demons, the enemies of gods in the form of Rama and Hanuman. These two categories also find mention in the *gōlādhyāya* :

स्वर्मेरु स्थलमध्ये नरको यडयामुखं च जलमध्ये
अमरनरा मन्वन्ते परस्परमघःस्थितान् नियतम् ।१२।

The heaven and the Meru mountain are at the centre of the land (i.e. at the north pole); the hell and the Vadavamukha are at the centre of the water (i.e. at the south pole). The gods (residing at the Meru mountain) and the demons (residing at the Vadavamukha) consider themselves positively and permanently below each other. (p.123)

देवाः पश्यन्ति भगोलाद्यमुदङ्मेरुस्थिताः सध्यम्
अर्धं त्वपसव्यगतं दक्षिणवडयामुखे प्रेताः ।१६।

रविवर्षार्धं देवाः पश्यन्त्युदितं रविं तथा प्रेताः ।१७।

The gods living in the north at the Meru mountain (i.e. at the north pole) see one half of Bhagola as revolving from left to right (or clockwise); the demons living in the south at Vadavamukha (i.e. at the south pole), on the other hand, see the other half as revolving from right to left (or anticlockwise).

The gods see the sun, after it has risen for half a solar year; so is done by the demons too. (p.127)

So the gods and demons are opposites ; denizens of the lighted north and the dark south; standing in opposite directions like the *kadamba* flower's peduncles. It may be mentioned here that the word *naraka* (the south pole) has a cognate in SI languages , meaning *darkness*.

In the Isha Upanishad there is clear indication that the region of demons is covered by darkness (असूर्या नाम ते लोका अन्धेन तमसाःयुताः।). Mythology applied the metaphor back to the abode of the humans, considering the very direction south as belonging to demons. And demons came to be those phenomena that caused darkness : monsoon clouds emanating from Lanka covering the moon for four months ; Rahu and Ketu , the demons that shroud the sun and moon during eclipses.

5. Kadamba, cāpa and vyāsa

The गोलपाद (The Chapter on Spheres) describes the earth by the metaphor of a spherical flower:

यद्वत् कदम्बपुष्पप्रन्थिः प्रचितः समन्ततः कुसुमैः
तद्वद्धि सर्वसत्त्वैर्जलजैः स्थलजैश्च भूगोलः ॥७॥

'Just as the bulb of a *kadamba* flower is studded all around by blossoms, just so is the globe of the earth studded by all creatures water-borne and land-borne.

The *kadamba* (*Anthocephalus cadamba*) flower is round with exserted (protruding) stigmas around, arranged in terminal, globose, peduncled heads. Therefore the metaphor is perfectly fitting. Creatures like human beings standing upright on the earth-base with heads high are like the protruding stigmas. Aryabhata's conviction that the earth is round is explicit in the metaphor.

As the earth and the celestial sphere are round, calculations involve the properties of a circle. The गणितपाद gives the relations between various components of a circle :

परिधेः षड्भागज्या विष्कम्भार्धेन सा तुल्या ॥९॥

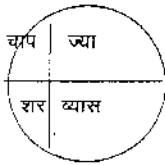
समचापज्यार्धानि तु विष्कम्भार्धे यथेष्टानि ॥११॥

The chord of one-sixth of the circumference (of a circle) is equal to the radius (9) Then one can find as many Rsines of equal arcs as one likes, for any given radius. (11) (p.44-45 K S Sharma)

यश्चैव भुजावर्गः कोटीवर्गश्च कर्णवर्गः सः

वृत्ते शरसंवर्गोऽर्धज्यावर्गो यः खलु धनुषोः ॥१७॥

(In a right-angled triangle) the square of the base plus the square of the upright is the square of the hypotenuse. In a circle (when a chord divides it into two arcs), the product of the arrows of the two arcs is certainly equal to the square of half the chord. (17) (p.59)



In these verses also, the geometrical entities are expressed through metaphors. The arc of a circle is called the bow (चाप), the chord is the 'cord' of the bow (ज्या) and the portion of the diameter between the arc and chord is called the arrow (शर). It will be seen that the diameter of the circle is the largest chord and the radius at right angles to the diameter becomes the maximum शर. The diameter (विष्कम्भ) is also called व्यास (जिला भूव्यासः १९.७ | Earth diameter 1050 yojanas).

The name of the author-poet of the Mahabharata is given as व्यास whose birth is stated to be result of the union of पराशर and मत्स्यकन्या. The stories relating the birth and upbringing of the latter are so weird that they can only be considered as mythical. The only way in which some sense can be made of the episodes, is by searching for the metaphors behind the names of characters and the events narrated. These are seen to be related to astronomy of the twelve houses on the ecliptic.

Matsya-kanyaa is a *dvandva* compound of the names given to two houses of the sun along the ecliptic : Pisces and Virgo. These are halfway along the 'circle' of the ecliptic. The *shara* of the half-ecliptic-circle would be the maximum, *paraashara*. *Metaphorically speaking*, the union of पराशर and मत्स्यकन्या gives *birth* to व्यास !

6. Conclusion

Metaphor has played an important role right from the formation of language to grasping secrets of the universe. In science its scope is restricted. In mythology it is extensive, leading to mixed and complex metaphors of nouns, verbs and events. Elementary science and mythology are found intermixed in Sanskrit works. Careful attention to metaphors will save us from reading too much science in Sanskrit mythology.

□ □

नवखण्डपुराणम् ।

विश्वनाथ खैरे इत्यनेन विरचितम् ।

निमिषं ब्रह्मणः प्रोक्तं ननुष्ययुगसंमितम् ।
ब्रह्मणो युगकोटीनां कालो यास इति श्रुतिः ।१।

पुराऽऽरम्भे तु कालस्य एकं स्वर्गधरे स्थिते ।
इच्छावशात् ब्रह्मणस्तु कृते स्वभूवियोजनम् ।२।
ऊर्ध्वं पृथ्वी धारयित्री वनानां वनवासिनाम् ।
जले स्थले घरन्तां च जीवानां बहुरुपिणाम् ।३।
पृथिव्याः खण्डभागानां ख्यातं तु प्रमुखं त्रयम् ।
आशयं च सुरूपं च आग्नीकं कृष्णसंनिभम् ।४।
अथ खण्डे सुरूपे श्रीदेवपुत्रस्य घोषिताः ।
कृष्टिधर्मः समष्टीनां अनेकानां प्रियोऽभवत् ।५।
कृष्टिधर्मपथो मुख्यः कथालीको महाबलः ।
कथालकेति नाम्नाऽपि रोमकैः सहकीर्तितः ।६।
अलीकानां कथानां ते श्रद्धयन्ताः सनातनाः ।
रोमभेदमिव कृत्वा शब्दानां, अदयधराः ।७।
सत्येन देवपुत्रस्य भक्ता ये शुद्धिका मताः ।
कथालीकेश् छलैर्दण्डैर् भृशं ते पीडिताऽभवन् ।८।
पथा ये पुण्यशीलेन शुद्धिकाऽऽसन् यद्यर्षयः ।
धर्मरक्षामनस्कास्ते काले तीव्रा मिथोऽब्रुवन् ।९।
त्यजेदेकं कुलस्यार्थं ग्रामस्यार्थं कुलं त्यजेत् ।
देशस्यार्थं निजग्रामं धर्मार्थं देशमन्ततः ।१०।
एवं विधिन्य निश्चित्य नौबन्धनपराऽभवन् ।
न तलं यस्य भान्तो वा ज्ञाताज्ञातौ स्पृशन्स्थितः ।
अतलान्तं लमम्भोधिं तर्तुं गन्तुं च पश्चिमाम् ।११।
आपदो महतीस्तोषां समुद्रतरणोऽभवन् ।
याताहता दिशामूढा यादोमुक्ताश्च नैष्टिकाः ।१२।
अथ मासद्वयान्ते तु कृपाधानाः प्रभोर्दिवः ।
समुद्रवसनां पृथ्वीं ददृशुर्हर्षनिर्मराः ।१३।

NAVAKHANDAPURĀNAM

Composed by Vishvanath Khaire

A blinking moment of the Lord is said to measure an eon of man.

Past Time has been milliards of eons of the Lord, say the scriptures. 1.

In the beginning of Time, heaven and earth stood as one.

At the Lord's will, their separation was achieved in the *kr̥ta* age. 2.

The wide earth became bearer of woods and their dwellers,

And of various forms of beings living in the waters and on lands. 3.

Of the earth's continents, the principal three are wellknown :

āśāya (limited by the directions), *surūpa* (the well-formed), *āprīka* (of the Aprī) that was like black. 4.

In the *surūpa* continent, the *kr̥ṣṭi* religion, proclaimed by the son of God became the favourite of many nations. 5.

The main sect of the *kr̥ṣṭi* religion was the powerful *kathālika* (of tales untrue) which, by the name *kathālaka* (hair-tale) was also spoken of in association with *rōmaka* (bristles) . 6.

Those orthodox fellows, believing in the tales untrue, carried on mercilessly, hair-splitting with words of the tales. 7.

Those true worshippers of the Lord, the *śuddhika* (purifiers) were much tortured through deceit and punishments by the *kathālika*. 8.

In course of time, those *śuddhika* who wished to tread the virtuous path and were staunchly resolved to protect the faith, said among selves, .9.

" Give up one for the sake of family, give up the family for the sake of the hamlet, give up the hamlet for the sake of country, and finally, give up the country for *dharma*'s sake." 10.

Having resolved thus, they started building a boat for going west crossing the *atalanta* ocean that has no bottom nor end and that lies touching the known and the unknown. 11.

They ,the devout, had great difficulty in crossing the ocean; they were thrashed by storms, they faltered in their bearings; some were even swallowed by creatures of the seas. 12.

However, at the end of two months, with the grace of god in heaven, they were delighted to see land, wrapped with the sea as garment. 13.

तदा वेलातटे स्थित्वा प्रार्थयन्तो नवं नयम् ।
 आपूर्तस्तवना आसन् स्तनितैर्जनितैर्भुवा ।१४ ।
 तथा ह्यम्बुधिदीचीनामुदगरन्तां च गुल्फिनाम् ।
 वासानामपक्रामन्तां सूचिभूर्जौक-गंगमान् ।१५ ।
 सहानीतविशेषाणां धेनूनां हम्भ-राविणाम् ।
 स्तनंधयानां वत्सानां बालान्युत्क्षिप्य धाविनाम् ।१६ ।
 स्तनितान् शुश्रुयुर्धोरा वह्नेलांश्चैव ददृशुः ।
 शिशून् वहन्तो ये मीना भूत्वा तेभ्यो दुहन्ति च ।१७ ।
 अहो आश्चर्यमित्याहुः श्रुतदृष्टस्तना हि ते ।
 'बहुस्तने'ति नामापि चक्रुस्ते पट्टणस्य च ।१८ ।
 सागरं चुम्बतीं धारां अन्तस्ते प्रविवेशतुः ।
 पुराऽज्ञातामिमां भूमिं केषांचित् भारतीं मताम् ।१९ ।
 प्लवगा योजनार्धान्ते शुश्रुवुः 'स्वागतं' वचः ।
 वक्ताऽऽसीत् तप्तमुद्राङ्गस् ताग्रकायो धनुर्धरः ।२० ।
 स्कान्तोऽहं स्का चा मे भार्या तपस्कं कुलनाम मे ।
 तपदीर्घानिवासीनां देवेशवरलब्धिनाम् ।२१ ।
 पुरा युगशतं तप्त्वा निर्विण्णो गिरिभिः शिवः ।
 अज्ञाते जलसांनिध्ये तपस्तप्तुमिहागतः ।२२ ।
 तदाऽऽद्यः पुरुषोऽस्माकं गणस्तं पर्युपासते ।
 भीषणो महिषोऽप्यस्य पशूनां पतिमाश्रितः ।२३ ।
 यदा तु प्रेषितो देवैर् मदनोऽत्र समागतः ।
 प्रभोस्तृतीयनेत्रस्य ज्वालाभिः परिवारितः ।२४ ।
 पुरुषो महिषश्चापि स्थितौ भूत्वाऽस्य संनिधौ ।
 आदग्धौ परिधायन्तौ विशतः सरितामिनाम् ।२५ ।
 ततःप्रभृति महिषा अंशतः शेषकेशिनः ।
 वयं च ताग्रतप्ताङ्गास् तपस्का हरकीर्तिताः ।२६ ।
 कामप्राज् नामतः स्थानं कामदाहात्प्रकीर्तितम् ।
 सरिता रक्षती तौ द्वे चारुलास्या हराशिषा ।२७ ।

जानीध्वं स्थानमैतिह्यं हरवरदं ख्यातिमद्भवत् ।
 शृण्वतां श्रद्धया भद्रं भवेद् वो भूतिमाप्नुत ।२८ ।

इति नवपुराणे नवखण्डपुराणं नाम प्रथमोऽध्यायः ।

Alighting on the shore, they prayed from the new testament. Their prayers were augmented by the dins rising from mother earth. 14.

For instance, of the waves of the ocean, of emissions of dolphins, of winds rustling through sky-reaching pines, birches and oaks. 15.

Of bellowing cows specially brought with them, of their milking calves on the run, throwing up their tales. 16.

They of strong minds, heard the dins and saw the whales that even being fish, carry their young and nurse them too. 17.

'Ohi Wonder!' they cried, hearing the murmurs and seeing the mammals.

And they even named the harbour *Bahustana, one with murmurs or mammaries*. 18.

They then entered the river kissing the sea, thinking that this land unknown to them before, was Indian. 19.

As they sailed a knot, 'Welcome!' they heard, spoken to them by one who was a copper-skin archer with painted face and torso. 20.

'I am *Skanta* (with name ending in *ska*) . *Ska* is my wife and *tapaska* (burnished) is the name of our family, blessed by the God of gods and living in long houses with a corridor of burning fires. 21.

In the remote past, Shiva, tired of the mountains, where he had penanced for a hundred eons, came to this place for penance unknown, by the waters. 22.

That time, our founding father waited on him as a *gana* and his frightening bison too sought shelter with the Lord of animals. 23.

And when Madana sent by the gods came here, he was shrouded in flames from the third eye of the Great god. 24.

Our Father and the bison, who were standing close to him, were also licked by the flames, whence they ran to jump into this river here. 25.

Since then the bisons have only a partial residual coat , and we people became burnished-copper-bodied, named by Shiva himself as *Itapaska* (performers of penance, the burnt ones). 26.

As a result of the burning of *Kama*, the place came to be known as *Kama-bhraj*, (that lights up *Kama*). The river that saved the two was, by the boon of Shiva, called *charulasya* (of whom the dance special to Shiva's consort is beautiful). 27.

Know ye, this historic place is called *Harivarada* (bestower of Shiva's boons) ; and listening with faith, blessed be and attain prosperity. 28.

End of chapter *Navakhaṇḍapurāṇam* in the *Navapurāṇam*.

अथ वृत्तिः। अनन्ते खलु काले द्यावकाशे च मतिमतो मानवस्य धारिणी धरणी अनन्या इव दृश्यते। तस्या अपि प्राच्यो भागः सविशेषः पुराणकालादारभ्य मानवकृतसंस्कृतिसंभारैरलंकृतः। अपि तत्रत्यानामविज्ञात आसीत् उदीच्यमुखण्डभागः, शताब्दपञ्चकपूर्वमेव गवेषितस्, तस्माच्च नवखण्ड इति मत्वा ततःपरं विकसितः। इत्येतस्मिन् नवखण्डे 'अमेरिका'सभिधाने 'नव-इंग्लैंड'-आह्वये संस्थाने पुराणस्य अस्य पाठः प्रथमः प्रवाचितः, मंगलवासरे एकस्मिन्, पुराणप्रियाणां हार्वर्डविद्यापीठस्थपण्डितानां काव्यशास्त्रविनोदार्थं संस्कृतविभागशालायां संनीलन्तां संमुखम्।

पुराणं तु नवमेव। परंपराप्राप्तानां भारतीयपुराणानां समाकलनस्य 'संमत' इति संस्कृत-मराठी-तमिळ इत्येतेषां आद्याक्षरैः साधितेन प्रत्याहारेण निर्दिष्टामनेकविदं पद्धतिमनुसृत्य तस्याश्च उपयोजनेन तेषांविधमेव परिणामं साधयितुं रचितम्। विषयोऽपि पूर्वेषां पुराणानामनुकारी। तथा हि, स्थलनामादीन् पुरस्कृत्य लोकभाषागतानपि तान् संस्कृतभाषासरणीशरणान् सम्पाद्य तेषामाधारतः देवदेवतादीनामिव पुराणकथा निर्धारितव्या।

उपर्युक्तकथाऽध्याये अमेरिकास्थितनदीनगरादिनामानां, तत्रत्यानामादिमजानानां नामरूप-सम्यतादीनां आङ्ग्लादिभाषाशब्दानां उद्भ्रंशानामुपयोजनेन, अमेरिकागवेषणेतिहासं च अंशमात्रं यथातथा वर्णयित्वा पुराणकथा साधिता। ते शब्दादयोऽत्र विवृता यथानिम्नम्।

आशेयम् Asia सुरूपम् Europe आप्रीकम् Africa कृष्टिधर्मः Christian Faith
कथालीक, कथालक Catholic रोमक Roman शुद्धिका Puritans अतलान्त
Atlantic नवं नयम् New Testament गुल्फिनः dolphins वहेल whale
बहुस्तन Boston स्कान्तः Squanto स्का squaw महिष bison
तपस्क Red Indian कामभ्राज् Cambridge चारुलास्या Charles
हरवरदम् Horward

सिद्धोद्भ्रंशानां व्युत्पत्तिविग्रहादीनि यथा संस्कृते संपाद्यैव पुराणकथारचना कर्तव्या पुराणानां सरणिमनुसृत्य। तद् यथा - आशेयं आशाभिर्दिशाभिः संबद्धव्यम्। सुरूपं स्पष्टम्। आप्रीके आप्रीसूक्तरचनाभूमिः कल्पनीया। आप्रीकं कृष्णवर्णमिति मूलशब्दार्थात्। कृष्टिधर्मः कर्षयति लोकान् इति मन्तव्यम्। स्मर्तव्यमत्र यद् वाद्यस्पतिभिर्भाण्डारकरमहोदयैर्वासुदेवकृष्णः ख्रिस्तेनाभिषिक्तेन सम्बन्धायितः। कथालीका अलीकानां कथानां बोद्धारः। कथालक, रोमक इति शब्दौ केशसंबंधिनौ मतो। अतलान्तो महोदधिः। गुल्फिनः इति शब्दः भारतयुरोपीयव्युत्पत्त्या समर्थते। वहन्ति वत्सान् पीठेषु ते वहेलाः। बहूनां स्तनानां स्तनितानां च षट्ठणं बहुस्तनं, मूलतः गौ-पुरमित्यर्थवतः पुरनाम्न उद्भ्रंशः। स्का इति ताम्रभारतीयेति ख्यातानां भाषायां भार्या-स्त्री-वाचकः शब्दः। कामो मदनो भ्राज्यते यत्र तत् कामभ्राज्नामकं स्थलम्। चारुलास्या तु गिरिजा। हरस्य वरो दत्तो यत्र तद् हरवरदं नगरं विशत्यां शताब्दौ संस्कृतविद्यायाः सुमहत् पीठं संजातमिति प्रसिद्धमेव। इति।

NOTES

In the vast expanse of Time and Space, the earth which supports the intelligent human being appears to be unique. Even on the earth, the eastern half is adomed since a distant past, by the cultures created by man. People of this part aiscowers unaware of the western landmass, discovered about five hundred years back, and developed thereafter as the new continent. In this new continent, in the state called New England, the first reading of this *purana* was given before a Tuesday gathering of the lovers of Sanskrit in the Harvard University, Interested in literary pursuits.

The *purana* is, however, new. It has been modelled on and intended to achieve the effects of, traditional Indian mythologies, as understood by the multidisciplinary SAMMATA approach, that being an acronym for SAMskrit-MARathi-TAMli unity of Indian languages. The subject and method are similar to those of the older *puranas* ; namely, to consider placenames etc from folk-speeches, adapt them to Sanskrit phonology and to produce a mythical narrative on their basis.

In the instant example, a 'mythical-like' narrative is composed by employing *udbhramsha* (Sanskrit-sounding transformations) of American place-names and English terms designating the names, forms and cultures of her original natives and weaving a thread of the modicum of history of the discovery of America by the Pilgrim Fathers. The word-items so transformed are shown below :

āsēyam Asla surūpam Europe āprīkam Africa kṛṣṭidharmaḥ Christian Faith
kathālīka, kathālaka Catholic rōmaka Roman śuddhikāḥ Puritans atalānta
Atlantic navamṇayam New Testament gulphinaḥ dolphins vahēla whale
bahustana Boston skāntaḥ Squanto skā squaw mahiṣa bison
tapaska Red Indian kāmabhrāḥ Cambridge cārulāsyā Charles
haravaradam Howard

The composition, of course, proceeds on the basis of analysis of the Sanskritised formations in accordance with Sanskrit grammar. So āsēya is related to āśā 'directions', surūpa is 'of good shape', āprīka is the land of *apri* hymns though Africa is black originally, kṛṣṭidharma is, by this name, assumed to 'attract people'. It may be recollected that the great savant Dr Bhandarkar had related vāsudēva kṛṣṇa to Christ (the anointed) merely on the basis of sounds. The kathālīka 'stick to tales untrue' while kathālaka, rōmaka are to be related to hair. atalānta is the Atlantic Ocean 'without bottom or bound'. The term gulphinaḥ for 'dolphins' can be justified by IE etymology. vahēlāḥ 'whales' are so called for 'they carry their young on the back'. Boston 'cow-town' is made bahustana 'the place of many murmurs or mammaries'. skā 'squaw' the Native-American term for wife comes handy for the male name skānta (ending in ska) and the clan-name tepaśka's ending. kāmabhrāḥ for Cambridge comes to mean 'the place where love-god Mādana is burnt', cārulāsyā, Parvatī, 'danseuse of the beautiful *iasya*' is from river-name Charles. haravarada is the place where Shiva bestows his boon - from Harvard, which incidentally came to the fore as a seat of Sanskrit learning in the twentieth century.

Heart and Head

Vishvanath Khaire

In almost all cultures, traditionally, the heart has been assumed to be the seat of human emotions and the brain as the arena of intelligence, rational thinking etc. In this Paper, references to the heart in the Gita are considered, as elucidated by the śāṅkarabhāṣya. Noting that Śankara appears to treat hṛdaya and buddhi as synonymous, attention is drawn to modern researches that posit the brain as the exclusive seat of both emotions and intelligence. As an immediate outcome, it is proposed that śraddhā or faith, long held to be beyond the purview of intelligenc or reason, can and should be rationally deliberated upon.

1. Introduction

Acharya Vinoba Bhave begins his discourse on the Gita with these remarks :

Nourished on mother's milk as my body was, my heart and intellect have been nourished even more on the milk of the Gita. (माझे शरीर आईच्या दुधावर पोसले, त्यापेक्षाहि माझे हृदय व बुद्धि यांचे गीतेच्या दुधावर अधिक पोषण झाले आहे. - गीताप्रवचने)

The greatest exponent of the Gita in the 20th century thus makes a clear distinction between heart and the intellect. In almost all cultures in the world, this distinction has been made in one form or another. The distinction has affected to some extent, if not cut and dry philosophy, at least popular perception and spiritual discourse.

The Concise Oxford Dictionary (1976) gave the following meanings for the word **heart** : 2. Breast, bosom; mind, intellect; seat of inmost emotions.

By and large, these meanings define the popular view of the functions of this 'hollow muscular organ keeping up circulation of blood' in the human body. In Sanskrit, the words हृद् हृदय etc generally denote similar concepts.

2. Heart in the Gita and śāṅkarabhāṣya

We will consider references to 'heart' in the Gita and the meanings assigned to them in शांकरभाष्य (Sbh), the most respected commentary.

Gita 4.42 asks Arjuna 'to strike off the doubt हृत्स्थं संशयं residing in the heart with the sword of knowledge.(तस्मादज्ञानसम्भूतं हृत्स्थं ज्ञानासिनाऽत्मना। छित्त्वेन संशयं योगमातिष्ठोत्तिष्ठ भारत।) Sbh explains: हृत्स्थं हृदि बुद्धौ स्थितं 'residing in the heart i.e. in the *intellect*'.

Gita 8.12 describes the passage of a yogi departing from the body for the highest state. This is accomplished, among others, मनो हृदि निरुध्य च 'and having restrained the mind in the heart'. Sbh explains :मनो हृदि हृदयपुण्डरीके निरुध्य निरोधं कृत्वा 'having restrained the mind in the heart that is, in the *heart-lotus*'. Clearly, the heart is accepted as the space for *holding the mind*. The Sbh reference to 'heart-lotus' is an obvious reflection of the Ayurvedic-anatomical concept or description of the heart organ :

पुण्डरीकाकारहृदयस्य संबन्धिन्यो नाड्यो हृदयमांसपिण्डात् सर्वतो विनिःसृताः इति बृहदारण्यकोपनिषदि।

Acc. to the Brhd. the vessels connected to the lotus-shaped heart are spread everywhere from the muscle-dough of the heart.)

पुण्डरीकेन सदृशं हृदयमधोमुखं तिष्ठति, जाग्रतः तद्विकसति, निमीलति च स्वपतः।सुशा ४.३२।

The heart, similar to the lotus, stands face down; of the person awake, it opens out, of the sleeping it closes.

मानतश्चतुरङ्गुलम्, कमलमुकुलाकारमधोमुखं च, एतत्सद्यःप्राणहरं मर्म।सुशा ६.६।

Four *angulas* in measure, face-down like a lotus bud, it is the vulnerable point for sudden loss of life.

Thus, from Upanishadic times on, the heart as organ is described to be similar to an inverted lotus or unopened lotus bud. The comparison is very apt and apart from spatial shape no other attributes of the lotus are simulated with the heart.

Gita 13.17 asserts ज्ञानं ज्ञेयं ज्ञानगम्यं हृदि सर्वस्य विहितम् : 'the known, the knowable and the destination of knowledge are wellset in the *heart* of all'. Here Sbh clarifies तदेतत्त्रयमपि हृदि बुद्धौ सर्वस्य प्राणिजातस्य विहितं विशेषेण स्थितम्। 'the entire trio is resident in the heart, meaning in the intellect, of all living beings'. As the allusion is to the realm of knowledge, the equation of the heart to intellect is very clear.

In Gita 15.15 the Lord declares सर्वस्य चाहं हृदि संनिविष्टो, 'and I, in the *heart* of all, am enclosed'. Sbh explains : सर्वस्य प्राणिजातस्याहमात्मा सन् हृदि बुद्धौ संनिविष्टः 'I being the soul of all living beings, am wellset into their heart, meaning

in the intellect'. So, it would appear, the Lord is a concept and intellect as a concept is housed in the heart.

Almost the same statement, albeit in the third person, occurs in Gita 18.61 ईश्वरः सर्वभूतानां हृदयेऽर्जुन तिष्ठति 'God stays , dear Arjuna, in the heart-region of all the beings'. Sbh here merely paraphrases हृदये as हृदयेऽरे.

Overall, then, it would appear that by *heart*, Sbh means *intellect*, wherever the word occurs in the philosophy of the Gita. What Sbh means by intellect can be seen from the following references :

२.५३ समाधौ अचला बुद्धिः । - बुद्धिः अन्तःकरणम् ।

Intellect is the inner apparatus.

७.१० बुद्धिः बुद्धिमता अस्मि । - बुद्धिः विवेकशक्तिः अन्तःकरणस्य ।

Intellect is the reasoning power of the inner apparatus.

१०.४ बुद्धिः ज्ञानं असंमोहः । - बुद्धिः अन्तःकरणस्य सूक्ष्माध्यायबोधोपसामर्थ्यम् ।

Intellect is the power of grasping the meanings right from the minute.

So, intellect is 'the inner instrument, its reasoning power, its ability to grasp the minutest shades of meaning.' This corresponds to the meaning assigned to the term बुद्धि in common parlance.

3. Heart and Faith

Generally this intellect or reasoning power is distinguished from, if not contrasted with श्रद्धा meaning 'faith, trust, confidence, trustfulness.' The nyāyakōśa defines : श्रद्धा फलावश्यमावनिश्चयः । विश्वासत्वेन ज्ञानम् । आस्तिक्यबुद्धिः श्रद्धा इति पौराणिका वदन्ति । ' Faith is the conviction of achieving a result. It is knowledge obtained through trust. The votaries of Puranas say that faith is the Believer's bent of mind'

Faith or श्रद्धा is not considered related to intellect or reason, among others. Further, श्रद्धा is assumed to be a faculty of the heart and the very word is said to have been related to the Sanskrit word for heart; e.g. Monier Williams : 'श्रद्, श्रद् prob. allied to L. *credo*; *cord-is* Gk. *kardia* : heart'. Nearer home we have , from SI languages and Marathi, the phonetic-semantic cognates of Skt. hṛdaya.

Ta. u| inside, mind, heart

uru to pass in one's mind; think.

Mar. hurahura grieving, regretting, uneasy hankering

hurūpa afflux of spirits (rural) hurada heart

So it would be seen that the Indian word for heart carries the semantic association with emotions

Why the heart came to be identified with emotions, thoughts etc can be easily imagined. It is the heart among all organs, that is constantly beating

and showing the signs of life. It is the heart that demonstrates the effects of change of emotions, fears, moods and the like. Life appears to end when heartbeats cease and the pulse stops.

4. The Brain

Apparently, there is a divergence between the popular view of heart as the seat of emotions and faith and the Sbh view of the equivalence of heart and intellect. The popular view has been that the head and the brain inside it do the thinking and reasoning and retain memories or imagine things. In fact Yogic philosophy was wholly based on the nerves, the नाडी's passing through the spine and culminating into the brain. Psychology posited the mind in the head and Western science brought out centres of verbal and other capabilities in the brain. The conceptions about the brain from popular speech to the latest researches (from 'The Emperor's New Mind' - Roger Penrose 1989) are briefly put down below to enable comparison with the heart.

'Inside our heads is a magnificent structure that controls our actions and somehow evokes an awareness of the world around. Yet..it resembles nothing so much as a bowl of cold porridge' (p.374). This physical resemblance is contained in the words of languages :

Lat. *cera-* wax; *cerebrum* brain

Ta. *tayir* brain matter

mūjal brain, marrow

mitaz brain Ka. midu|, mēdaḍu

mētu softness mēṅmal softness Ka. mēdu soft

Mar. *mēna* wax; *mendu* brain

Skt *mēdhā* intellect

Anatomically, the most *porridge-like* portion on the top is the cerebrum, divided into left and right hemispheres and front to back into three lobes : parietal, temporal and occipital. At the back down is the little brain or cerebellum, like two balls of wool. There are also the brain-stem, thalamus, hypothalamus, corpus callosum among others.

The cerebrum and cerebellum have comparatively thin outer surface layers of *grey matter* and inner layers of white matter. The grey matter is where computational tasks appear to be performed, while the white matter consists of long nerve fibres carrying signals from one part of the brain to another. Primary regions of the cerebral cortex deal directly with the visual, auditory, olfactory, somatosensory, and motor input and output of the brain. The secondary regions process the information. It is in the tertiary regions that the information from various sensory regions is intertwined and analysed in a very complex way, memories are laid down, pictures of the outside world are constructed, general plans are conceived and evaluated

and speech is understood and formulated. Learning of new skills is by the *cerebrum*; once they are learnt, the *cerebellum* takes over. It is responsible for the precise coordination and control of the body - its timing, balance, and delicacy of movement. The *hippocampus* plays a vital role in laying down permanent memories. The *corpus callosum* is the region via which the right and left cerebral hemispheres communicate with one another. The *hypothalamus* is the seat of emotion -pleasure, rage, fear, despair, hunger- and it mediates both the mental and the physical manifestations of emotion. The *thalamus* conveys many of the nerve inputs from the external world to the cerebral cortex. The *reticular formation* is responsible for the general state of alertness or awareness involved in the brain as a whole or in different parts of the brain. There are numerous pathways of nerves connecting these, and many other, vitally important areas. From the spinal column an, the parts of the brain are *hindbrain*, *midbrain*, and the *forebrain*, the most ancient in evolution to the newest in that order.

It is obvious, therefore, that श्रद्धा and बुद्धि as they have been traditionally distinguished, both reside in the brain and the heart has precious little to do with them. Perhaps it is the recognition of this position that is reflected in the order of meanings for 'heart' in 1999 edition of the Concise Oxford Dictionary :

1. a hollow muscular organ that pumps the blood through the circulatory system by rhythmic contraction and dilation.
2. the central, innermost or vital part of something.

5. Conclusion

Contrary to popular perception, śāṅkara the Philosopher rightly affirmed that doubt, mind, knowledge and even God reside in the intellect, which means, in the brain. Modern science has proved that not only intellect but 'all matters of the heart' also reside in the brain. śraddhā or faith should also be an attribute of the brain and should be within the purview of deliberation as such.

□ □ □

New Light on the Culture in Maharashtra

Vishvanath Khaire

According to the prevailing view, the language and culture in Maharashtra are related to Sanskrit and the culture as represented in the Sanskrit texts from Vedas down to about the tenth century, Marathi language and literature then taking over. The influence of South Indian languages is considered as minimal, on the borders of the Marathi region and on the fringes of culture in Maharashtra. This Author's studies published since 1977 have brought out a mass of evidence in language, mythology, place names, cults and culture, that proves deep connection with South Indian languages and cultures and calls for revision of the prevailing view. The studies have however not been critically deliberated in academic circles. With a view to initiate the process, this Paper briefly puts down the gist of these studies.

1. Introduction

For two centuries now, the Vindhya mountains are assumed to have prevented linguistic-cultural interaction between the Indian peoples living on their north and south sides. The (NI) languages and culture north of the Vindhyas are considered as related totally to Sanskrit. The region in which Marathi is spoken at least for a millenium now, is situated wholly south of the Vindhyas. Yet the language and culture in Maharashtra are asserted to be related only to the NI family. Those in the region south of Maharashtra, are considered related to the different (the SI) family; they are not considered to have had any influence in Maharashtra except near the common borders. Sociology made some allowance for interaction, positing Maharashtra as battle ground for cultures in the north and south. Philology made none, presenting an unbroken picture of the Marathi language emerging from Sanskrit through various stages observed in the literary records of past ages.

2. The संमत Concept

Suggestions of an SI substratum in rural Marathi by Dr Wilson in his preface to Molesworth's dictionary in the mid-nineteenth century were almost ignored and by mid-twentieth century, Marathi was firmly assigned to the NI family.

In 1977, this writer wrote a series of fifteen articles in the साधना weekly, bringing out the SI content in Marathi vocabulary and in the social traditions and worship cults in Maharashtra. These were published with extensive notes as the book 'अडगुलं मडगुलं' (1981). They relate to :

- nursery rhymes like 'अडगुलं मडगुलं'
- popular Marathi metres like *ovi*, ballads like *पोवाडा*
- myth formation through speech-interaction : सरड-विष्णु
- place and personal names in the Inscriptions at Karle, Bhaje, Nasik..
- words in ज्ञानेश्वरी, like मन्हाट अळुकी
- Marathi expletives like इशरा, अय्या, छूः
- Primacy of and SI content in Marathi illiterates' speech
- common cults : Murugan, Khandoba, Vithoba, and ritual practices like *gondhal*, *vari*, *kathi* etc.
- words relating to body, kinship and the kitchen

For about 400 words Marathi-SI equivalence has been discussed. That the Sanskrit 'originals' proposed are only imaginative Sanskrit-sounding transformations (उद्भ्रंश) has been explained where necessary.

The small book 'द्रविड महाराष्ट्र' '*Dravida Maharashtra*' (1977) examines placenames and their sanskritisations proposed in earlier literature; proposes the semantically appropriate SI cognates for them. Distinction is made between *mythical*, *legendary* and *historical* episodes (मिथ्यकथा, तथ्यकथा, सत्यकथा) about place and country names with a view to reach to true origins. Names of villages and hamlets around Pune, Mumbai are shown to have meanings tallying with topography and occupations, on the basis of SI words with similar sounds.

The Paper '*Tamil Alveolars in Marathi Vocabulary*' brings out the phonetic correspondence of Tamil *ra na la* with Marathi *ra na lha*, giving a large number of examples. (1978 LSI Delhi)

'इतिहासपूर्व मराठमोळी' '*Prehistoric Marathi Speech*', a 25-page essay brings

out the SI content in cults and myths deliberated in D D Kosambi's 'Myth and Reality'. It concludes that the language in prehistoric Maharashtra would have been like Tamil (मराठी संशोधन पत्रिका २५-२).

'Tamil-Sanskrit Interaction in the Agastya Myth' (35p) considers the myth from Vedas down. It proves that Agastya was not a historical person, but the name of the mythical character personifying the star *Canopus* and the tree *Sesbania grandiflora*. The Paper opens up a new pan-Indian approach to the understanding of mythology as against its interpretation. (All India Oriental Conference 1978)

'Discovery of a Missing Link in Indian Culture' examines 'Culture of the Marathi People' (मराठी लोकांची संस्कृती) by Iravati Karve and provides alternative explanations on many details, on the basis of SI data. (10th Int. Congress of Anthr. and Ethn. Sc. 1978)

मराठी भाषेचे मूळ (*Origin of the Marathi Language, 1979*) being text of a lecture series at the मराठी संशोधन मंडळ, मुंबई, compares the rural dialectal Marathi forms with the spoken Tamil forms and brings out the semantic superiority of Marathi-SI etymology over forced Sanskrit 'reconstructions'. For debatable issues of grammar in Bloch's *Evolution of the Marathi Language* and Tulpule's यादवकालीन मराठी भाषा (Marathi of the Yadava Times) are resolved by recourse to SI grammar (e.g. *Tolkappiyam*). The Sam-Ma-Ta concept of Sanskrit-Marathi-Tamil unity is introduced. The Paper '*Sanskrit-Marathi-Tamil : The Sammata Links*' (International Tamil Conference 1981) brought out the relationship in its various aspects.

3. Understanding Indian Mythology

Sanskrit has come down to us mainly as a language of mythology that has been interpreted for historical inferences. Studies of language and mythology are, therefore, interdependent. The *sammata* concept employed with multidisciplinary knowledge enables us to understand the foundations of Indian mythology. It appears that Vedic hymns contain myths based on striking natural phenomena, passed on by pre-vedic peoples. The epics similarly versify and expand into Sanskrit, folktales of the various linguistic groups. वेदातली गाणी (*Songs from the Veda* 1996) containing Marathi verse translations of fifteen hymns from the Veda brings out this feature.

These conclusions emerge from the inquiries into various mythical episodes, dealt in detail in भारतीय मिथ्यांचा मागोवा (*Inquiry into Indian Myths*)

(1986). Fifteen stories taken at random were similarly probed in a popular serial गोष्टींचे गूढ *Mystery of the Stories* (1986). The first book of Ramayana was dealt for reaching the original myths in 'रामायणाची गोष्ट' (*Story of the Ramayana*) (1988) imagined as an exposition by Valmiki to the uninitiated. With Rama, demons and monkeys turning out to be myths of the moon, monsoon clouds and comets-meteors, earlier historical interpretations will need revision. The episode of Ramasetu and of Rama's travels of various *ashrams* gives indications that they were composed with society and cults prevailing in the Nasik-Akola and Khandesh regions. (*Ramasetu ani Lonar*, 1996)

The main characters of the Mahabharata story also appear to be based on astral and terrestrial phenomena. The brothers Pandu and Dhritarashtra represent the bright and dark parts of the moon; Kunti is the virgin *Citra* of constellation Virgo and Gandhari, brightest of the *Dhanishthas*. The five pandavas correspond to five stars of *Hasta (Corvus)* and Kauravas to शततारका। Vyasa true to his name appears to be diameter of the earth's orbit defined by मत्स्य *Pisces* and कन्या *Virgo*. Krishna (dark) and Balarama (fair) are the two parts of the moon again.

Episodes of the miracles of Jnanadeva are shown in ज्ञानेश्वरांचे चमत्कार '*Miracles of Dnyaneshvara*' (1996) to be based on misreading and misinterpretation of some of his verses to produce narratives ascribing supernatural powers to the saint. The role of metaphor' (transfer of meaning) in this process was explained in '*Miracles, Myths and Words*' (1996).

The *Sammata* perspective enables us understand the down-trodden's-eye view of Mahatma Phule in his writings on mythology. (जुन्या कथा, नवी कोडी *Old Stories, New Riddles*). It also enables sifting of Dr Ambedkar's critique of Rama on the assumption of a factual narrative in the letter of Ramayana. (रामाचे कोडे *The Riddle of Rama* 1998)

4. Indian Linguistics

For purposes of philology, Marathi now becomes a 'bi-family' document, as its vocabulary traditionally explained through the NI family, is correctly explained through the SI family. Therefore it is, that this new light on the language in Maharashtra leads us to the formulation of 'Indian' rather than the sectarian NI and SI linguistics. In three Papers presented at the Dravidian Linguistics Association in 1990, 1992, 1994 the ground has been

broken for this to build upon.

The first Paper showed that almost all the strictly SI items in Emeneau's '*Dravidian Phonology*' are current in Marathi with sufficiently regular phonetic and obvious semantic variations. The second compared the Sanskrit 'reconstructions' in Turner's *Comparative Dictionary of the Indo-Aryan Languages* , for items in Old-Marathi, with their proper SI cognates in Burrow and Emeneau's *Dravidian Etymological Dictionary*. It is shown that the former employ one or two prefixes (*upasarga's*) for deriving primary verb-items in Marathi like येणे, बसणे (come, sit), which is unlike a natural language.

The third Paper spelt the proposal for an *Indian Etymological Dictionary* in which Marathi would play a central role in bridging the two family-dictionaries and would draw upon the resource of other Indian languages also. By way of illustration, etymologies were given for items in the word-list in Caldwell's *Comparative Grammar of the Dravidian or South Indian Languages* where they were meant to show *differences* in the two families.

5. Conclusion :The Prospects

Investigation and appreciation of the SI element in the language and culture of Maharashtra opens up a vast field for reaching backwards in time in the history not only of Maharashtra but of India as a whole. As archaeology brings to light more and more ancient cultures in Maharashtra, so will the SI languages help us in going further to the ancient Indian natural languages out of which the literary instrument that is Sanskrit, was fashioned. We can feel the antiquity of gods like Khandoba and Vithoba, imagine the functional names of the many kinds of ancient pottery, realise that the *garhs* of gods are sites of ancient caves or rock-shrines, that the sacred trees of the Vedas are all Indian. If we perceive that in keeping with the *Sammata* concept , it will not be necessary any more to look to the Indo-European connection for understanding the Vedas, we will usher into the New Indology.

□□□